

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) An isolated polynucleotide according to Claim 5 which encodes a protein comprising the amino acid sequence of SEQ ID NO:2.
- 2 (Canceled) The isolated polynucleotide of Claim 1, wherein said protein has LuxR transcriptional activation activity.
3. (Previously Presented) An isolated polynucleotide according to Claim 5, which comprises SEQ ID NO:1.
- 4 (Currently Amended): An isolated polynucleotide which is complimentary to an isolated polynucleotide comprising SEQ ID NO:1 ~~the polynucleotide of Claim 3.~~
5. (Currently Amended) ~~An isolated polynucleotide which is at least 70% identical to a polynucleotide comprising the nucleic acid sequence of SEQ ID NO: 1; The isolated polynucleotide according to Claim 3,~~ wherein said polynucleotide encodes a protein having LuxR transcriptional activation activity.
- 6-9. (Canceled)
10. (Currently Amended) An isolated polynucleotide, consisting ~~which consists~~ of at least ~~15~~ 30 consecutive nucleotides of an isolated polynucleotide comprising SEQ ID NO:1 ~~the polynucleotide of Claim 3.~~

11 (Original): The isolated polynucleotide of Claim 10 which comprises SEQ ID NO:3.

12 (Original): A vector comprising the isolated polynucleotide of Claim 1.

13 (Original): A vector comprising the isolated polynucleotide of Claim 3.

14 (Original): A host cell comprising the isolated polynucleotide of Claim 1.

15 (Original): A host cell comprising the isolated polynucleotide of Claim 3.

16. (Previously Presented) The host cell of Claim 14, which is a Coryneform bacterium.

17. (Previously Presented) The host cell of Claim 15, which is a Coryneform bacterium.

18. (Previously Presented) The host cell of Claim 14, wherein said host cell is selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium melassecola*, *Corynebacterium thermoaminogenes*, *Brevibacterium flavum*, *Brevibacterium lactofermentum*, and *Brevibacterium divaricatum*.

19. (Previously Presented) The host cell of Claim 15, wherein said host cell is selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetoacidophilum*, *Corynebacterium melassecola*, *Corynebacterium thermoaminogenes*, *Brevibacterium flavum*, *Brevibacterium lactofermentum*, and *Brevibacterium divaricatum*.

20-36 (Canceled)

37 (Original): A method for making LuxR protein, comprising: culturing the host cell of Claim 14 for a time and under conditions suitable for expression of LuxR protein, and collecting the LuxR protein.

38 (Original): A method for making LuxR protein, comprising: culturing the host cell of Claim 15 for a time and under conditions suitable for expression of LuxR protein, and collecting the LuxR protein.

39 (Canceled)